R
858
B532
v.17
1983

Excerpta Medica Biophysics, Bioengineering and Medical Instrumentation

Section 27

UIC
JAN 18 1984
LIBRARY

1983 Vol. 17

HOW TO USE THE EXCERPTA MEDICA ABSTRACT JOURNALS

This section is one of 43 Excerpta Medica abstract journals which together cover the complete field of biomedical science. The abstracts in each issue are arranged according to subject and may be scanned for current awareness on general topics. To help with more specific questions, each issue contains a detailed Table of Contents, Author Index and Subject Index. These are cumulated in the last issue of each volume (10 or 12 issues) enabling detailed retrospective searches to be carried out on various specific subjects.

TABLE OF CONTENTS

A detailed, decimal subject classification, especially designed for the section, is used to sequence the abstracts in each issue. The most important elements of this classification are printed on the inside front cover together with the page number on which the first abstract in that category appears. A cumulative Table of Contents containing the complete classification is produced for each volume. Please note that abstracts are published only once per section in the most relevant sub-category. No cross-references are provided between subcategories and possibly related abstracts published under another category.

ABSTRACT SECTION

The abstracts are grouped into chapters, paragraphs and if appropriate sub-paragraphs, each headed by a short descriptive phrase. Within each (sub)category, abstracts are numbered in sequence of their accession to the E.M. database. This number is used as a key in the Author and Subject Indexes. Each abstract is preceded by the bibliographic details of the original paper, consisting of the English title, the original language title, the names and initials of up to four authors, the address of the first author, the abbreviated title of the journal, year of publication and volume number/issue number (page numbers).

AUTHOR INDEX

The Author Index should be used to find papers by a particular author and is found at the back of each issue immediately following the Abstract section. Each entry consists of the author's name preceded by the abstract number under which the appropriate item may be found in the Abstract section. Where more than 4 authors exist, only the first three are named.

SUBJECT INDEX

The Subject Index should be used to find out what has been published on a particular specific subject. Each entry term, printed in bold, is followed first by the other entry terms assigned to that article, in alphabetical order, then by secondary terms and free text (if appropriate) describing the article in more detail and finally by the Abstract number. If the entry term is the key to more than one abstract, it is replaced by - for second and subsequent abstracts. The various indexing terms occurring in each entry form a 'mini-abstract' reflecting the contents of the original document and facilitating a decision as to the possible relevance of the full abstract.

MALIMET*

Specialist indexers may assign any specific terms which come to mind when reading the article and these are then carefully controlled by a computerized authority file called MALIMET* (Master List of Medical Indexing Terms). In this way, minor spelling variations, synonyms and linguistically different terms are translated into the preferred terminology to ensure a consistent Subject Index. New terms are added continually to Malimet to reflect the continuing development of medical science, but only after careful review by the board of Chief Editors.

COMPUTER SEARCHING

While the abstract journals provide ready access to the major articles in the subject matter of the section, references to articles on interdisciplinary matters or articles from less important sources can more effectively be retrieved by computer. The Excerpta Medica database EMBASE,* contains from 1½ to 2 times as many references as are announced in the abstract journals, each classified and indexed from multiple points of view.

For further details, write to:

Excerpta Medica *Database Division*, P.O. Box 1126, 1000 BC Amsterdam The Netherlands
or Excerpta Medica Inc., P.O. Box 3085, Princeton, NJ 08540 USA

* MALIMET and EMBASE are Trade Marks of Excerpta Medica.

CONTENTS

1. GENERAL ASPECTS	1,	61,	123,	181,	203,	- ,	305,	- ,	413,	- .
1.1. History	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- .
1.2. Components	1,	61,	123,	181,	203,	- ,	305,	- ,	- ,	- .
1.3. Standards	2,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- .
2. BIOPHYSICS AND BIOENGINEERING	2,	61,	123,	181,	203,	257,	307,	359,	413,	467.
2.1. Fundamental concepts	- ,	- ,	126,	- ,	204,	257,	- ,	- ,	- ,	468.
2.2. Mechanical systems	3,	62,	127,	181,	204,	257,	307,	359,	413,	468.
2.3. Heat and thermodynamics	8,	66,	- ,	182,	206,	258,	- ,	360,	417,	471.
2.4. Bioacoustics	8,	67,	130,	183,	206,	259,	310,	361,	417,	472.
2.5. Biooptics	10,	68,	131,	184,	207,	259,	310,	361,	418,	473.
2.6. Gas physics	13,	68,	- ,	185,	207,	261,	311,	362,	419,	474.
2.7. Fluid flow systems	13,	69,	132,	185,	208,	261,	313,	363,	421,	474.
2.8. Electrical systems	14,	70,	134,	186,	210,	262,	315,	364,	422,	476.
2.9. Nuclear biophysics	17,	72,	135,	189,	211,	263,	316,	365,	425,	479.
3. GENERAL INSTRUMENTATION	20,	73,	136,	189,	213,	264,	317,	366,	425,	480.
3.1. Transducers	20,	- ,	- ,	189,	214,	- ,	- ,	366,	425,	480.
3.2. Amplifiers	- ,	- ,	137,	- ,	214,	264,	- ,	- ,	425,	480.
3.3. Indicators	- ,	- ,	- ,	- ,	214,	- ,	- ,	- ,	- ,	- .
3.4. Recorders	21,	- ,	- ,	189,	- ,	- ,	- ,	366,	- ,	- .
3.5. Generators	- ,	74,	137,	- ,	215,	- ,	- ,	- ,	425,	- .
3.6. Telemetric devices	21,	74,	137,	- ,	215,	264,	317,	366,	425,	480.
3.7. Data loggers	- ,	- ,	137,	- ,	215,	- ,	- ,	- ,	- ,	- .
3.8. Cameras	21,	- ,	137,	- ,	216,	264,	318,	367,	427,	481.
4. COMPUTERS	- ,	74,	138,	- ,	217,	264,	318,	367,	427,	481.
4.1. Averagers	- ,	74,	- ,	- ,	217,	- ,	- ,	- ,	427,	- .
4.2. Analog computers	- ,	- ,	- ,	- ,	- ,	- ,	- ,	367,	- ,	- .
4.3. Digital computers	- ,	- ,	138,	- ,	217,	265,	318,	367,	428,	- .
4.4. Hybrid computers	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- .
5. SPECIFIC MEASUREMENTS	21,	74,	139,	189,	218,	265,	319,	367,	428,	482.
5.1. Temperature measurement	21,	74,	139,	189,	- ,	265,	319,	- ,	- ,	482.
5.2. Time measurement	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- .
5.3. Frequency measurement	- ,	- ,	- ,	- ,	- ,	265,	- ,	- ,	- ,	- .
5.4. Pressure measurement	- ,	75,	139,	- ,	218,	- ,	- ,	- ,	428,	- .
5.5. Flow measurement	21,	75,	140,	190,	- ,	- ,	319,	- ,	428,	- .
5.6. Flow resistance measurement	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- .
5.7. Volume measurement	- ,	- ,	- ,	190,	- ,	- ,	- ,	367,	- ,	482.
5.8. Density measurement	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	482.
5.9. Acceleration measurement	- ,	- ,	- ,	- ,	- ,	- ,	- ,	- ,	428,	- .
5.10. Displacement measurement	- ,	- ,	140,	- ,	- ,	265,	- ,	- ,	- ,	- .
5.11. Electrical phenomena	22,	75,	- ,	- ,	218,	265,	319,	368,	- ,	- .
5.11.1. Electrical activity measurement	22,	75,	140,	190,	218,	265,	319,	368,	428,	482.
5.11.2. Impedance measurement	22,	75,	- ,	- ,	- ,	266,	- ,	368,	- ,	- .
5.12. Gas concentration measurement	22,	76,	140,	190,	218,	266,	319,	369,	429,	483.
5.13. Hydrogen ion concentration measurement	23,	- ,	141,	191,	219,	- ,	320,	369,	429,	483.
5.14. Radiation measurement	23,	76,	141,	- ,	219,	266,	320,	- ,	- ,	483.
5.14.1. Visible light	24,	76,	141,	191,	219,	267,	320,	369,	430,	484.
5.14.2. Ultraviolet radiation	- ,	- ,	142,	191,	220,	- ,	- ,	- ,	- ,	- .
5.14.3. Infrared radiation	24,	- ,	142,	191,	220,	- ,	321,	- ,	- ,	- .
5.14.4. Radiowaves	24,	76,	143,	- ,	220,	267,	321,	370,	430,	484.
5.14.5. Roentgen radiation	25,	77,	144,	191,	- ,	268,	321,	371,	431,	484.
5.14.6. Alpha, beta and gamma radiation	26,	77,	145,	192,	221,	268,	322,	371,	431,	485.
5.14.7. Neutrons	27,	79,	146,	192,	222,	- ,	323,	371,	432,	486.
5.14.8. Cosmic radiation	28,	- ,	146,	- ,	223,	- ,	325,	- ,	- ,	- .

5.14.9.	Sound	28,	80,	146,	192,	223,	268,	325,	373,	432,	487.
6.	SPECIALIZED INSTRUMENTATION	29,	81,	147,	192,	223,	269,	326,	374,	433,	487.
6.1.	Metabolism	- ,	81,	148,	192,	224,	269,	- ,	374,	433,	488.
6.2.	Thermoregulation	- ,	- ,	148,	- ,	- ,	- ,	- ,	374,	- ,	- .
6.3.	Digestive tract	- ,	82,	148,	192,	225,	270,	326,	- ,	434,	- .
6.4.	Liver and bile ducts	- ,	82,	- ,	- ,	225,	- ,	- ,	- ,	434,	- .
6.5.	Blood	- ,	82,	148,	- ,	225,	- ,	- ,	374,	434,	488.
6.6.	Lymphatic system	29,	- ,	148,	- ,	- ,	- ,	- ,	374,	- ,	- .
6.7.	Circulation	29,	82,	148,	193,	226,	271,	326,	375,	434,	488.
6.8.	Respiration	31,	85,	149,	194,	229,	272,	327,	376,	436,	490.
6.9.	Reproductive system	31,	- ,	151,	194,	231,	- ,	- ,	- ,	437,	491.
6.10.	Urinary tract	32,	86,	151,	- ,	231,	272,	329,	- ,	437,	- .
6.11.	Nervous system	32,	86,	152,	- ,	231,	272,	329,	376,	437,	491.
6.12.	Receptors	33,	88,	153,	194,	231,	273,	329,	377,	438,	493.
6.13.	Locomotor apparatus	34,	89,	153,	194,	232,	274,	330,	377,	438,	493.
6.14.	Skin	35,	91,	154,	- ,	- ,	276,	331,	- ,	439,	494.
6.15.	Aerospace medicine	- ,	- ,	- ,	195,	234,	- ,	332,	- ,	- ,	- .
6.16.	Work and sport	- ,	91,	- ,	- ,	234,	- ,	- ,	377,	439,	495.
6.17.	Radiology	35,	92,	154,	195,	234,	276,	332,	377,	440,	- .
6.18.	Anesthesia	37,	93,	157,	- ,	235,	277,	334,	378,	440,	495.
6.19.	Monitoring	- ,	93,	157,	195,	- ,	278,	- ,	- ,	441,	- .
7.	SURGICAL INSTRUMENTS	37,	94,	158,	196,	236,	278,	334,	378,	441,	495.
8.	NEW INSTRUMENTS	- ,	- ,	- ,	196,	- ,	- ,	- ,	- ,	- ,	- .
9.	COMPUTER APPLICATIONS	37,	94,	158,	196,	236,	278,	335,	379,	441,	495.
9.1.	Hospital automation	39,	95,	158,	197,	236,	278,	335,	379,	442,	495.
9.1.1.	Laboratory techniques	39,	95,	159,	197,	236,	279,	335,	379,	442,	496.
9.1.2.	Administration	41,	- ,	- ,	197,	- ,	- ,	- ,	- ,	- ,	497.
9.1.3.	Pharmacy	41,	- ,	- ,	197,	237,	- ,	335,	380,	443,	497.
9.2.	Medical history	41,	96,	160,	197,	237,	280,	335,	380,	443,	498.
9.3.	Clinical diagnosis	41,	96,	160,	198,	238,	280,	336,	380,	443,	499.
9.4.	Electrodiagnosis	42,	- ,	161,	- ,	239,	281,	- ,	- ,	- ,	- .
9.4.1.	Electrocardiography	43,	96,	161,	198,	239,	281,	336,	- ,	444,	499.
9.4.2.	Electroencephalography	43,	97,	162,	198,	240,	281,	336,	381,	445,	500.
9.4.3.	Electromyography	44,	98,	162,	- ,	240,	- ,	336,	- ,	446,	500.
9.4.4.	Electroretinography	44,	- ,	- ,	- ,	241,	- ,	- ,	- ,	- ,	- .
9.5.	Patient monitoring	45,	- ,	163,	- ,	241,	281,	336,	381,	446,	501.
9.6.	Drug treatment	45,	98,	164,	199,	241,	282,	337,	382,	446,	501.
9.7.	Radiology	45,	99,	164,	199,	242,	282,	337,	382,	446,	501.
9.8.	Medical record documentation	56,	118,	177,	- ,	251,	302,	354,	406,	463,	514.
9.9.	Literature documentation	56,	- ,	178,	- ,	- ,	- ,	355,	406,	464,	514.
9.10.	Function tests and techniques	57,	118,	178,	200,	252,	302,	355,	407,	464,	515.
9.10.1.	Blood circulation	58,	119,	178,	200,	253,	302,	356,	407,	465,	517.
9.10.2.	Respiratory system	59,	120,	179,	201,	253,	303,	357,	408,	465,	518.
9.10.3.	Nervous system	59,	120,	179,	201,	254,	303,	357,	409,	466,	519.

© 1983, Elsevier Science Publishers B.V. (Biomedical Division), Amsterdam

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, e
ronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher, Elsevier Science Publishers B.
(Biomedical Division) P.O. Box 1527, 1000 BM Amsterdam, the Netherlands.